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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on <u>09 June 2006</u>.

2a) ☐ This action is **FINAL**.     2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) <u>1-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-18</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>06/09/2006</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All    b) ☐ Some *  c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>06/09/2006</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

## DETAILED ACTION

1. Claims 13-30, have been examined and are pending.

### *Information Disclosure Statement*

2. An initialed and dated copy of applicant's IDS form 1449 submitted 06/09/2006, is attached

to the instant office action.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter which the applicant regards as his invention.

Claims 13-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

As per claims 13 and 29, the meaning of the phrase "switching perspective" is not clear.

As per claims 17, and 28, the phrase "substantially the same permanent and semi-

permanent" is not clear.

As per claim 30, the phrase "paired-redundancy" is not clear.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 13 and 28 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11 and 23 of copending Application No. 10582592.

**Regarding Instant Application claim 13**, a network configuration for substitute-switching of a switching system, comprising:

a first switching system having access to a transmission network and active from a switching perspective **(Copending Application claim 11, discloses a first switching system in an active operating state in terms of switching)**;

a redundant switching system assigned as a redundancy partner to the first switching system**(Copending Application claim 11, i.e. providing a pair of switching systems having one-to-one redundancy)**, the redundant switching system having access to the transmission

network and is inactive from a switching perspective **(Copending Application claim 11**

**discloses a second switching system in a hot-standby operating state in terms of switching)**;

and

a network management system operatively connected to the first and redundant switching

systems **(Copending Application claim 11, discloses establishing communication between a**

**monitoring system and at least one of the paired switching systems)**.

a real-time monitor operatively connected to the first and redundant switching systems and the

transmission network**(Copending Application claim 11, discloses establishing**

**communication between a monitoring system and at least one of the paired switching**

**systems)**, when a communication to the first switching system fails the real- time monitor causes

the redundancy partner to become active from a switching perspective **(Copending Application**

**claim 11 discloses, changing over in terms of switching from the active switching system to**

**the hot-standby switching system in the event of a loss of communication to the switching**

**system in the active operating state, wherein the change over occurs in real time)**


Although the conflicting claims are not identical, they are not patentably distinct from

each other because both the instant application claim 13 and the copending application claim 11

disclose a paired switching systems having one-to-one redundancy for the purpose of fault

tolerance. The Instant application claim 13 and the Copending Application claim 11 recites

similar limitations, the difference being that in claim 13 of the Instant Application, applicant

recites a network configuration for substitute-switching of a switching system. The copending

application claim 11; however, discloses a method for substitute switching of spatially separated

switching systems.

However, a method claim anticipates a system claim with similar limitations. Therefore,

claim 13 of the Instant Application is a system claim version of claim 11of the Copending

Application, thereby making it obvious over claim 13.


**Regarding Instant Application claim 28,** system for monitoring redundant switching

system(**Copending Application claim 23 discloses a monitoring system for monitoring a**

**failure of an active switching system),**

a communication link to a first switching system that is active from a switching

perspective(**Copending Application claim 23 , discloses a first communication link to the**

**active switching system, the active switching system in an active operating state in terms of**

**switching)**;

a communication link to a redundant switching system that is inactive from a switching

perspective(**Copending Application claim .23 discloses a second communication link to a**

**second switching system that is geographically separated from the first switching system,**

**the second switching system in a hot-standby operating state in terms of switching)**;

a monitor having real time switch over mechanism that causes the redundant switching system to

become active after a failure of the first switching system(**Copending Application claim 23**

**discloses a communication link between the first and second monitors, wherein a failure on**

**the first communication link triggers the second switching system to change over to the**

**active operating state)**

The copending application's claim 23 does not teach where the active and standby

switching systems have the same permanent and semi-permanent data. However, it would have

been obvious to one ordinary skill in the art at the time the invention was made to include the

same permanent and semi-permanent data on both the active and the standby switching systems,

so that the standby switching system functions in a similar manner as the active switching system

when a failure occurs.

This is a provisional obviousness-type double patenting rejection.

## *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13-16, 23, and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by

Kleine-Altekamp to **(US6914879).**

**Regarding claim 13,** Kleine-Altekamp teaches a network configuration for substitute-switching

of a switching system **(see, fig.2),**

a first switching system**(i.e. fig.2 , box.21)** having access to a transmission network and active

from a switching perspective **( fig.2 , box.21 , abstract and col.2 , lines 38-49 , disclose an**

**active switching matrix)** ;

a redundant switching system(i.e. **fig.2 , box.22)** assigned as a redundancy partner to the first

switching system, the redundant switching system having access to the transmission network and

is inactive from a switching perspective **(fig.2 , box.22 , abstract , col.2 lines 38-49 , disclose a**

**standby switching matrix);**

a network management system operatively connected to the first and redundant switching

systems **( col.3 lines 25-29 discloses network management system);**

a real-time monitor **(i.e. controller )** operatively connected to the first and redundant switching

systems and the transmission network **( fig 2, box. 25 and box.26, discloses that the controllers**

**are connected with first (box.21)**, **redundant switching (i.e. box 22) and transmission**

**network (i.e. all I/O's )),** when a communication to the first switching system fails the real- time

monitor causes the redundancy partner to become active from a switching perspective**( col.3**

**lines 29-39 discloses the controller switch from active matrix (i.e. fig.2 box 21) to the**

**standby matrix (i.e. fig.2 box 22) in the event of failure and make standby switching matrix**

**(i.e. fig.2 box 22) active ) .**


**Regarding claim 14**, Kleine-Altekamp teaches a plurality of real-time monitors operatively

connected to each other **(see, fig.2, box. 25 and box.26)**


**Regarding claim 15**, Kleine-Altekamp teaches a first (i.e. **fig.2, box.21)** and redundant (i.e. **fig.2**

**, box.22)**switching systems have packet base interfaces **(col.2 lines 50-67 and, (fig.2  of ,23, and**

**24)  discloses identical packets based  interfaces)**

**Regarding claim 16**, Kleine-Altekamp teaches a first (i.e. **fig.2, box.21**) and redundant (i.e.

**fig.2, box.22)** switching systems have the same packet addresses for the packet-based interfaces

**(fig.2, discloses I/O's 23 and I/O's 24 are connected with each other, thus have same**

**addresses).**


**Regarding claim 19**, Kleine-Altekamp teaches a first (i.e. **fig.2, box.21)** and redundant (i.e. **fig.2**

**, box.22)** switching systems have the same hardware and identical software **(fig.2 box 21 and 22**

**discloses similar switching matrixes).**


**Regarding claim 20**, Kleine-Altekamp teaches the identical software includes the same

software release and software patches **(fig.2 box 21 and 22 discloses similar switching**

**matrixes, and inherently it is obvious that first switching matrix and redundant switching**

**matrix to have identical software and structure so as redundant switching matrix functions**

**in similar manner in the event of failure).**


**Regarding claim 21**, Kleine-Altekamp teaches a first (i.e. **fig.2 , box.21)**switching system, the

redundant (i.e. **fig.2 , box.22)**switching system, the network management system and the real-

time monitor reside at different geographical locations **(fig.2 discloses the first switching**

**matrix reside in room #1 and the redundant switching matrix resides in room #3 and the**

**controllers are connected with short-range optical links with each other and with the**

**network management, thus all the elements are in different geographical locations)**.

**Regarding claim 23**, Kleine-Altekamp teaches a first (i.e. **fig.2, box.21**) and redundant (i.e. **fig.2**

**, box.22**)switching systems include packet-based interfaces having the same packet addresses

**(fig.2 , discloses I/O's 23 and I/O's 24 are connected with each other, thus have same**

**addresses)**


**Regarding claim 27**, Kleine-Altekamp teaches  a first switching system((i.e. **fig.2 , box.21)**, the

redundant(i.e. **fig.2 , box.22)** switching system, the network management system and the monitor

reside at different geographical locations **(fig.2 discloses the first switching matrix reside in**

**room #1 and the redundant switching matrix resides in room #3 and the controllers are**

**connected with short-range optical links with each other and with the network**

**management, thus all the elements are in different geographical locations)**  .


**Regarding claim 28**, Kleine-Altekamp teaches a system for monitoring redundant switching

system **(fig.2),** a communication link to a first switching system that is active from a switching

perspective **( fig.2 , box.21 , box.25, abstract and col.2 , lines 38-49 , disclose an active**

**switching matrix that is connected with a controller)** ;

a communication link to a redundant switching system that is inactive from a switching

perspective **(fig.2 , box.22 ,box 26, and  abstract , col.2 lines 38-49 , disclose a standby**

**switching matrix that is connected with the controller)** and that includes substantially the

same permanent and semi-permanent data**( inherently the redundant switching system has to**

**have similar data or structure to function as the first switching system in the event of**

**failure)**

a monitor having real time switch over mechanism that causes the redundant switching system to become active after a failure of the first switching system **(col.3 lines 29-39 discloses the controller switches the switching system from active matrix (i.e. fig.2 box 21) to the standby matrix (i.e. fig.2 box 22) in the event of failure and make standby switching matrix (i.e. fig.2 box 22) active ).**

**Regarding claim 29**, Kleine-Altekamp teaches a plurality of monitors that monitor each other and that coordinate the switch over **(see, fig.2, box. 25 and box.26).**

**Regarding claim 26**, Kleine-Altekamp teaches a transmission network that has a direct communications interface between the first switching system and the redundant switching system **(see fig.2)**

**Regarding claim 22**, Kleine-Altekamp teaches a redundant switching system is in an operating state such that all outward-switching-oriented packet-based interfaces are blocked and the system includes active applications **(col.4, lines 7-10 discloses the standby components also work during normal operation. Only their output signals are not selected, but ignored by the active components during normal operation).**

**Regarding claim 30**, Kleine-Altekamp teaches monitors do not switch between paired-redundancy switching systems in the event of faulted intercommunication **(col.3, lines 35-40**

discloses i.e., since 1:1 redundancy is provided for the switching matrices, in the event of a

hardware failure in the active switching matrix 21, controller 25 will switch to the second,

redundant switching matrix 22, which then perform the function of a new, active switching

matrix, and will deactivate the hitherto active matrix).

**Regarding claim 24**, Kleine-Altekamp teaches a transmission network that has a cross-connect

device that is controlled by the network management for switching TDM connections ( **FIG. 2.**

**col.2, lines 36-41, discloses a network element  that  is a digital cross connect for a**

**synchronous digital communications network, which is designed to switch fixed paths for**

**data transmissions within the network. The core element of the cross connect is a switching**

**matrix 21, 22, in which the connections between interface modules 23, 24 are switched. In**

**addition, Col.3 lines 22-30 discloses the cross connect is controlled by a first controller 25;**

**The controller is connected to a local control terminal 30 in order to be able to install,**

**maintain, and upgrade the cross connect. Further more, controller 25 is connected to the**

**network management system of the communications network and receives over this**

**connection instructions relating to the paths to be switched).**

**Regarding claim 25**, Kleine-Altekamp teaches  a transmission network that has a cross-connect

device that is controlled by the monitor for switching TDM connections ( **FIG. 2. col.2, lines 36-**

**41, discloses a network element  that  is a digital cross connect for a synchronous digital**

**communications network, which is designed to switch fixed paths for data transmissions**

**within the network. The core element of the cross connect is a switching matrix 21, 22, in**

**which the connections between interface modules 23, 24 are switched. In addition, Col.3**

**lines 22-30 discloses the cross connect is controlled by a first controller 25; The controller is**

**connected to a local control terminal 30 in order to be able to install, maintain, and**

**upgrade the cross connect. Further more, controller 25 is connected to the network**

**management system of the communications network and receives over this connection**

**instructions relating to the paths to be switched).**

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.    Determining the scope and contents of the prior art.
2.    Ascertaining the differences between the prior art and the claims at issue.
3.    Resolving the level of ordinary skill in the pertinent art.
4.    Considering objective evidence present in the application indicating obviousness
        or nonobviousness.

Claims 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleine-

Altekamp, in view of Smith to **(US6700868)**

**Regarding claim 17**, Kleine-Altekamp does not teach the first and redundant switching systems

each comprising a database having substantially the same permanent and semi-permanent data

However, Smith teaches the first and redundant switching systems each comprising a

database having substantially the same permanent and semi-permanent data **(fig.5, col.6 lines 28-**

**32, and col.6 lines 33-49 discloses downloading database onto the ATM processor cards 45,**

**46, which reside on ATM switching fabrics 41 and 42 where the switches are an active and**

**a standby switching system respectively).**

Therefore, it would have been obvious to one ordinary skill in the art at the time the

invention was made to include the same permanent and semi-permanent data on both the active

and the standby switching systems, as suggested by smith. This modification would benefit the

system of Kleine-Altekamp to enable the standby switching system functions in a similar manner

as the active switching system when a failure occurs.


**Regarding claim 18**, Kleine-Altekamp does not teach permanent data is data that may only be

modified via a software upgrade or a software patch, wherein semi-permanent data is data

entered via a user interface, and wherein the permanent and semi-permanent data do not include

transient data related to a call.


However, Smith teaches permanent data is data that may only be modified via a software

upgrade or a software patch, wherein semi-permanent data is data entered via a user interface,

and wherein the permanent and semi-permanent data do not include transient data related to a

call**(fig.5, col.6 lines 28-32, and col.6 lines 33-49 discloses downloading database onto the**

**ATM processor cards 45,46, which are reside on ATM switching fabrics 41 and 42 where the switches are an active and a standby switching system respectively).**

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to include a permanent data that is only modified via softer ware upgrade and semi-permanent data that is entered via the interface where both permanent and semi-permanent data do not include transient data related to a call, for the purpose of design choice.

## *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZEWDU BEYEN whose telephone number is (571)270-7157. The examiner can normally be reached on Monday thru Friday, 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 1-571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. B. /

Examiner, Art Unit 2419

/Hassan Kizou/

Supervisory Patent Examiner, Art Unit 2419